



00672511.TXT
SEQUENCE LISTING

<110> Efthymios Ippikoglou

<120> METHOD OF PRODUCING RECOMBINANT DNA MOLECULES

<130> 02901/0203760-US0

<140> 10/561,743

<141> 2005-12-20

<150> PCT/EP2004/006600

<151> 2004-06-18

<150> 60/480,581

<151> 2003-06-20

<150> 60/493,586

<151> 2003-08-07

<160> 31

<170> PatentIn version 3.1

<210> 1

<211> 1909

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> (1)..(1909)

<223> cDNA sequence for human b-FSH

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aaagaataaa gatcagtggc catttcaggc cacataccct tgtcctgaag gaccaagata 480

ttcaaaaagt ctgtgtgtgt gcaatgtgcc cagggacaa accactggat caggggattc 540

agactctact gatccctgggt ctactggcag agggactct gggatttag agtgctgggg 600

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agtcttaact cacagacttg tgcctggttt cttctttaaa aatcttagaa atcttctcag 720

gcaatgcctc tctcttaggg ggaaacataa gcctagaagg aggaaggagt aatgggagtg 780

agtgaaagaa ctaactgcag cagtctctg gtagactctt gggccctcta gagcaaggc 840

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<213> Homo sapiens

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<222> (1)..(5)
<223> β -FSH signal sequence

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<210> 3
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<212> DNA
<213> Homo sapiens

<220>
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<223> exon #1 of human β -FSH (NM_000510)

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Met Lys Thr Leu Gln Phe Phe Leu Phe Cys Cys Trp Lys Ala Ile
1 5 10 15

tgc tgc aat agc tgt gag ctg acc aac atc acc att gca ata gag aaa 96
Cys Cys Asn Ser Cys Glu Leu Thr Asn Ile Thr Ile Ala Ile Glu Lys
20 25 30

gaa gaa tgt cgt ttc tgc ata agc atc aac acc act tgg tgt gct ggc 144
Glu Glu Cys Arg Phe Cys Ile Ser Ile Asn Thr Thr Trp Cys Ala Gly
35 40 45

tac tgc tac acc agg 159
Tyr Cys Tyr Thr Arg
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<223> exon #2 of human β-FSH (NM_000510)

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1 5 10 15

acc ttc aag gaa ctg gta tat gaa aca gtg aga gtg ccc ggc tgt gct 96
Thr Phe Lys Glu Leu Val Tyr Glu Thr Val Arg Val Pro Gly Cys Ala
20 25 30

cac cat gca gat tcc ttg tat aca tac cca gtg gcc acc cag tgt cac 144
His His Ala Asp Ser Leu Tyr Thr Tyr Pro Val Ala Thr Gln Cys His
35 40 45

tgt ggc aag tgt gac agc gac agc act gat tgt act gtg cga ggc ctg 192
Cys Gly Lys Cys Asp Ser Asp Ser Thr Asp Cys Thr Val Arg Gly Leu
50 55 60

ggg ccc agc tac tgc tcc ttt ggt gaa atg aaa gaa taa 231
Gly Pro Ser Tyr Cys Ser Phe Gly Glu Met Lys Glu
65 70 75

<210> 5
<211> 129
<212> PRT
<213> Homo sapiens

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Met Lys Thr Leu Gln Phe Phe Leu Phe Cys Cys Trp Lys Ala Ile 48
1 5 10 15

Cys Cys Asn Ser Cys Glu Leu Thr Asn Ile Thr Ile Ala Ile Glu Lys
20 25 30

Glu Glu Cys Arg Phe Cys Ile Ser Ile Asn Thr Thr Trp Cys Ala Gly

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35

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45

Tyr Cys Tyr Thr Arg Asp Leu Val Tyr Lys Asp Pro Ala Arg Pro Lys
 50 55 60

Ile Gln Lys Thr Cys Thr Phe Lys Glu Leu Val Tyr Glu Thr Val Arg
 65 70 75 80

Val Pro Gly Cys Ala His His Ala Asp Ser Leu Tyr Thr Tyr Pro Val
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Ala Thr Gln Cys His Cys Gly Lys Cys Asp Ser Asp Ser Thr Asp Cys
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<210> 6

<211> 390

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<213> Artificial Sequence

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<223> β-FSH X1X2 PCR product

<300>

<308> GenBank / NM_000510

<309> 2002-11-05

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atcaacacca ctgggtgtgc tggctactgc tacaccaggg atctggtgta taaggaccca 180

gccaggccca aaatccagaa aacatgtacc ttcaaggaac tggtatatga aacagtgaga 240

gtgccccggct gtgctcacca tgcagattcc ttgtatacat acccagtggc cacccagtgt 300

cactgtggca agtgtgacag cgacagcaact gattgtactg tgcgaggcct ggggcccagc 360

tactgctcct ttggtgaaat gaaagaataa 390

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<213> Artificial Sequence

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<223> primer PFX1 n.t. position 40-64 in SEQ ID NO: 1, cDNA sequence for human β-FSH

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25

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<210> 8
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<223> primer PRX1 n.t. position 198-178 in SEQ ID NO: 1, cDNA sequence
for human β -FSH

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<210> 9
<211> 21
<212> DNA
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<223> primer PFX2 n.t. position 199-219 in SEQ ID NO: 1, cDNA sequence
for human β -FSH

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gatctgggt ataaggaccc a 21

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<212> DNA
<213> Artificial Sequence

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<223> primer PRX2 n.t. position 429-407 in SEQ ID NO: 1, cDNA sequence
for human β -FSH

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<210> 11
<211> 42
<212> DNA
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<223> primer PRX1-PFX2'

<400> 11
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<210> 12
<211> 39
<212> DNA
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<223> X1UR product

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tgtgagctga ccaacatcac cattgcaata gagaaagaag aatgtcggtt ctgcataagc 120
atcaacacca ctgggtgtgc tggctactgc tacaccaggg atctggtgta taaggacca 180

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<223> alpha-FSH (NM_000735) full length cDNA sequence

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atgcagctat ctttctggtc acattgtcggtt tggttctgca tggttctccat tccgctcctg 180
atgtgcagga ttgcccagaa tgcacgctac aggaaaaccc attcttctcc cagccgggtg 240
ccccaaatact tcagtgcattt ggctgctgct tctcttagagc atatcccact ccactaaggt 300
ccaagaagac gatgttggtc caaaaagaacg tcacccatcaga gtccacttgc tgtgttagcta 360
aatcatataa cagggtcaca gtaatggggg gtttcaaagt ggagaaccac acggcgtgcc 420
actgcagtttac ttgttattat cacaatctt aaatgttttca ccaagtgcgtt tcttgcgtac 480
tgctgatttt ctggaatgga aaattaagtt gtttagtgtt tatggctttg tgagataaaa 540
ctctcccttt ccttaccata ccacttgcac acgcttcaag gatatactgc agctttactg 600
ccttccttcctt tattcctacag tacaatcagc agtcttagttc ttttcatttg gaatgaatac 660
agcattaaagc ttgttccact gcaaataaag ccttttaaat catc 704

<210> 15
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<213> Artificial Sequence

<220>
<223> PCR primer HCG-SENT

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<223> PCR primer HCG-ANTISENT		
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ttcttcctccc agccgggtgc cccaaatactt cagtgcattt gctgctgctt ctctagagca		180
tatcccactc cactaaggtc caagaagacg atgttggtcc aaaagaacgt cacctcagag		240
tccacttgct gtgttagctaa atcatataac agggtcacag taatgggggg tttcaaagtg		300
gagaaccaca cggcgtgcca ctgcagtact tgttattatc acaaatctta a		351
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<223> PCR primer HCG-SENTCACC		
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<223> PCR product CACCglycalA		
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cccattcttc tcccagccgg gtgccccat acttcagtgc atgggctgct gcttctctag	180
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agagtccact tgctgtgttag ctaaatcata taacagggtc acagtaatgg ggggtttcaa	300
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gagaaccaca cggcgtgcca ctgcagtact tgttattatc acaaataa tagctgtgag	360
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 gtgagagtgc cccgctgtgc tcaccatgca gattccttgt atacataccc agtggccacc 240
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 <223> PCR primer HCG-ANTISENT/woTAA

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<210> 24
 <211> 348
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> PCR product glycalwoTAA

<400> 24
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<210> 26
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<223> PCR product glycalwoTAAUR

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<212> PRT

<213> Artificial Sequence

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<223> synthetic peptide AB-FSH

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Glu Cys Thr Leu Gln Glu Asn Pro Phe Phe Ser Gln Pro Gly Ala Pro
35 40 45
Ile Leu Gln Cys Met Gly Cys Cys Phe Ser Arg Ala Tyr Pro Thr Pro
50 55 60
Leu Arg Ser Lys Lys Thr Met Leu Val Gln Lys Asn Val Thr Ser Glu
65 70 75 80
Ser Thr Cys Cys Val Ala Lys Ser Tyr Asn Arg Val Thr Val Met Gly
85 90 95
Gly Phe Lys Val Glu Asn His Thr Ala Cys His Cys Ser Thr Cys Tyr
100 105 110
Tyr His Lys Ser Asn Ser Cys Glu Leu Thr Asn Ile Thr Ile Ala Ile
115 120 125
Glu Lys Glu Glu Cys Arg Phe Cys Ile Ser Ile Asn Thr Thr Trp Cys
130 135 140
Ala Gly Tyr Cys Tyr Thr Arg Asp Leu Val Tyr Lys Asp Pro Ala Arg
145 150 155 160
Pro Lys Ile Gln Lys Thr Cys Thr Phe Lys Glu Leu Val Tyr Glu Thr
165 170 175

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Val Arg Val Pro Gly Cys Ala His His Ala Asp Ser Leu Tyr Thr Tyr
180 185 190
Pro Val Ala Thr Gln Cys His Cys Gly Lys Cys Asp Ser Asp Ser Thr
195 200 205
Asp Cys Thr Val Arg Gly Leu Gly Pro Ser Tyr Cys Ser Phe Gly Glu
210 215 220
Met Lys Glu
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<212> DNA
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<222> (1)..(561)
<223> cDNA sequence of INF-beta without stop codon

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tatgagatgc tccagaacat ctttgctatt ttcagacaag attcatctag cactggctgg 300
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<211> 513
<212> DNA
<213> Homo sapiens

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<222> (1)..(513)
<223> INF-alpha-2B sequence with enterokinase site

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00672511.TXT

<213> Homo sapiens

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